TOPOGRAPHIC SURVEY CONTROL POINT RECORD

STATION LONG NAME	MU24	
STATION NUMBER	MU24	
4 CHAR ID	MU24	
COUNTRY	IRAQ	
LOCATION	AL MUTHANA	
SURVEYING AGENCY	IGRS	
DATE (OF DESCRIPTION)	04 JULY 05	

CONTENTS	YES	NO	NO OF PAGES
FIELD COORDINATE VALUES	Х		1
OFFICE COORDINATE VALUES	Х		1
STATION MONUMENT & SITE DETAILS	Х		1
STATION DIAGRAM	Х		1
ACCESS MAP	Х		1
ACCESS DESCRIPTION	Х		1
APPROACH PHOTOGRAPHS	Х		1
CARDINAL POINT PHOTOGRAPHS	Х		2

RECORD OF VISITS

DATE OF VISIT	NAME	UNIT	REMARKS

ADDITIONAL DETAILS/ENCLOSURES

CONTENTS	NO OF PAGES

SECURITY CLASSIFICATION

REVISION DATE: 05 FEB 98 TOPO FORM 01a

FIELD COORDINATE VALUES

STATION LONG NAME	MU24
4 CHAR ID	MU24
STATION NUMBER	MU24

THIS STATION IS NEW	NO
NEARLY IDENTICAL WITH	-

FIELD VALUES FROM THE RECEIVER / HAND HELD GPS – IN WGS84

LATITUDE N	31° 26′ 38.05″		
LONGITUDE E	45° 40' 45.57"		
HT (M)	+06		
GRID ZONE DESIGNATOR	38R		
MGRS GRID	38R NV 64550 78999		
SURVEYING AGENCY	IGRS		

FIELD INPUT BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JULY 2005
FIELD CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JULY 2005

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OFFICE COORDINATE VALUES

WGS 84 ADJUSTED VALUES AS AT: 25 Aug 05

LATITUDE N	31º 26' 38.03685"
LONGITUDE E	045º 40' 45.61236"
SPHEROIDAL HT (M)	4.530
EGM96 GEOID MODEL HT (M)	-9.500
ORTHOMETRIC HT (M)	14.030
VERTICAL DATUM	WGS 84
GEOID MODEL USED	EGM 96
RELATIVE TO	CORS STATIONS
RELATIVE POSITION ACCURACY	0.013
RELATIVE HEIGHT ACCURACY	0.015
ADJUSTING AGENCY	OPUS
ADJUSTMENT DATE	25 AUG 2005

LOCAL DATUM VALUES AS AT: 25 Aug 05

SPHEROID	N/A
PROJECTION	N/A
GRID	N/A
VERTICAL DATUM	N/A
LATITUDE N/S	N/A
LONGITUDE E/W	N/A
EASTINGS (M)	N/A
NORTHINGS (M)	N/A
SPHEROIDAL HT (M)	N/A
ORTHOMETRIC HT (M)	N/A
GRID ZONE DESIGNATOR	N/A
TRANSFORMATION AGENCY	N/A
TRANSFORMATION DATE	N/A

GRAVITY VALUE: N/A		TYPE OF STN: N/A	REF: N/A
AIR PHOTO: N/A	REF: N/A		SCALE: N/A
IMAGERY: N/A	REF: N/A		SCALE: N/A
OFFICE INPUT BY: LC	PL COWARD	UNIT: IGRS	DATE: 25 AUG 2005
OFFICE CHECKED BY	LCPL DICKEN	UNIT: IGRS	DATE: 25 AUG 2005

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STATION MONUMENT AND SITE DETAILS

STATION LONG NAME: MU24

STATION NUMBER: MU24 4 CHAR ID: MU24

LOCATION: AL MUTHANA COUNTRY: IRAQ

STATION ADDRESS:N/A

TEL:N/A FAX: N/A

LAND OWNER ADDRESS: N/A

TEL: N/A FAX: N/A

TYPE OF MARK: PILLAR

CONDITION: GOOD

MARK SETTING:FINE POINT NO OF REBARS:N/A

MONUMENT PHOTO / SKETCH



PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JULY 2005
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JULY 2005

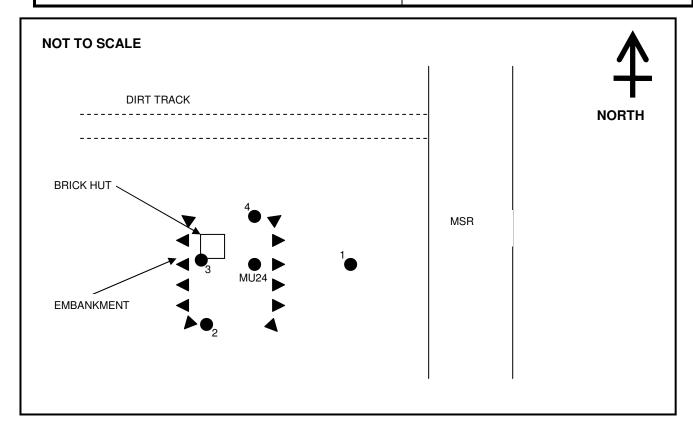
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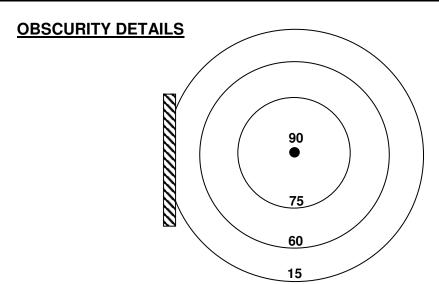
STATION DIAGRAM

STATION LONG NAME: MU24

STATION NUMBER: MU24 4 CHAR ID: MU24



NO	DESCRIPTION	BRG/HORZ ANGLE	DISTANCE(M)
1	ORANGE PICKET	230°	28
2	ORANGE PICKET	326°	27
3	SW CORNER OF BRICK HUT	50°	8
4	ORANGE PICKET	140°	20



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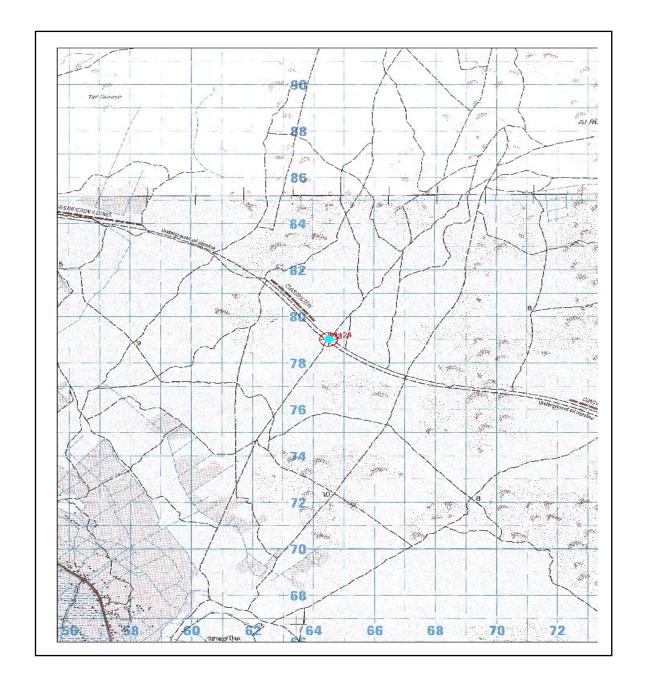
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ACCESS MAP

STATION LONG NAME: MU24
STATION NUMBER: MU24
4 CHAR ID: MU24

MAP DETAILS	SERIES: K643	SHEET: 5152
EDITION: 1-NIMA	SCALE: 1:100,000	GR: 38R NV 64550 78999



PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JUL 2005
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JUL 2005

ACCESS DESCRIPTION

STATION LONG NAME: MU24
STATION NUMBER: MU24
4 CHAR ID: MU24

MAP DETAILS	SERIES: K643	SHEET: 5152
EDITION: 1-NIMA	SCALE: 1:100,000	GR: 38R NV 64550 78999

From gr 38R NV 265 610, join main route at gr 38R NV 305 605, and travel south east for approximately 75km. Turn north west onto main route at gr 38R NV 960 415 and travel approximately 55km. Point is located on the south side of the MSR on top of a small hill. It is clearly visible from the MSR. Trig pillar gr is 38R NV 645 790.		

PREPARED BY: LCPL AVIS	UNIT: IGRS	DATE: 04 JUL 2005
CHECKED BY: SPR LOCKHART	UNIT: IGRS	DATE: 04 JUL 2005

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APPROACH PHOTOGRAPHS

STATION LONG NAME: MU24

STATION NUMBER: MU24 4 CHAR ID: MU24

NEAR APPROACH FACING NORTH



FAR APPROACH FACING NORTH



TAKEN BY: SPR LOCKHART DATE TAKEN: 04 JULY 2005

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CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU24

STATION NUMBER: MU24 4 CHAR ID: MU24

NORTH



SOUTH



TAKEN BY: SPR LOCKHART DATE TAKEN: 04 JULY 2005

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CARDINAL PHOTOGRAPHS

STATION LONG NAME: MU24

STATION NUMBER: MU24 4 CHAR ID: MU24

EAST



WEST



TAKEN BY: SPR LOCKHART DATE TAKEN: 04 JUL 2005

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